Graduate Address International Space University Masters Degree Recipients Rex Geveden Associate Administrator National Aeronautics and Space Administration Strasbourg, France September 1, 2006

Thank you President Simpson (Dr. Michael Simpson) for that kind introduction. Good morning ladies and gentlemen. I am honored to be here today to help congratulate the International Space Universities' very accomplished Class of 2006, to welcome the incoming class of 2007 and to share the stage with such distinguished space leaders as Mr. Favier (Jean Jacques Favier, Associate Director, Space Techniques, CNES).

At the outset I would like to thank you for having me here today. When I was offered the opportunity to speak here today, I have to admit my feelings of ambivalence. You can imagine how difficult it must have been for me to choose between staying in Washington D.C. in August to sign memoranda, review budgets, and attend meetings or traveling to the beautiful European city of Strasbourg to speak with young people about the future of space and to visit museums and dine in lovely restaurants. Surely you can appreciate the difficulty of that choice and recognize the significance of my sacrifice.

On a more serious note, here at the onset I wish to recognize the most important people here—the graduates of this year's class of the International Space University.

My congratulations to you for your very significant achievement.

Today, as one of your speakers I know my principal job is to be brief and be gone. But I hope to convey one or two ideas on this great day of celebration that you might take away as some food for thought.

I applaud you for dedicating your time and efforts to your studies here at ISU in space engineering and space management, as well as to the ideals that this unique institution represents. You are destined not only to be contributors to and perhaps leaders in the space programs of your native countries, but also leaders in the very noble work of making space exploration a cooperative, multinational endeavor. I firmly believe and the evidence

supports that what we do to further international space cooperation leads to greater peace and cooperation among nations here on Earth.

With this point in mind, please recall that on September 1st some 67 years ago, people in Strasbourg and throughout Europe woke up to the news that the second world war had begun. Now just think about the fact that orbiting about 400 kilometers over our heads, astronauts from three of the major powers that fought in that conflict—Germany (Thomas Reiter), Russia (Pavel Vinogradov), and the United States (Jeff Williams)—are now working side by side in a spirit of friendship and peace on the International Space Station. In about a month, I will personally greet Pavel and Jeff upon their

return to Moscow. Think about how far we have come, and think about where we can go by pooling our resources and ideas as we further explore our own planet and the worlds that exist beyond the horizon.

Now imagine if you will, if we can look beyond the current headlines of a world that regrettably is still the setting for rivalries and conflicts, what it will mean for all of human civilization to see an international crew take humanity's first steps on the surface of Mars. And imagine how fulfilling it will be for you to contribute to this epic quest. I can tell you that it is personally gratifying to go to work every day knowing that my NASA colleagues and I, and our colleagues from the world's other space-faring nations, are defining the future

scientific and exploratory missions that will surely impact the destiny of humankind.

And this is a natural step for mankind. Shortly before the Viking landing, the California Institute of Technology hosted a symposium that addressed the question: "Why Man Explores." Among the five famous panelists was the famous French explorer Jacques Cousteau who had this to say about exploration:

"The more I spend time observing nature, the more I believe that man's motivation for exploration is but the sophistication of a universal instinctive drive deeply ingrained in all living creatures. Life is growth—individuals and species grow in size, in number and in territory. The peripheral manifestation of growth is exploration of the outside world."

Just think about it. Where else can you go to work where you have the opportunity to do things that have

never been done before, and to help your fellow human beings see things that have never been seen before? That is I trust what compelled you to come here to ISU, and will put you in good stead, as you continue to pursue your dreams in your professional careers.

Given the wonderful cultural setting in which you have studied, I think it is quite useful to repeat the words of a column in the journal Mechanical Engineering which were written nearly 40 years ago. "Some generations create a system of laws," wrote the publication. "Other generations build cathedrals or pyramids. We today have the good fortune to inherit a great body of scientific knowledge, and on this base we have created a technology such as the world has never seen. We are the first

generation in the history of mankind with the technical capability to reach beyond our Earth, to realize the ageold dream of our fathers. Our cathedral is to reach the moon by 1970, and well beyond in the next decades."

Now most appropriately for this location, the great human creation of its era, the Strassbourg Münster (Moon-Stir), was completed in 1493, and became at that time the world's tallest building, surpassing the great pyramid of Giza. Today, Strasbourg is graduating the men and women who will create the great cathedrals of this generation, the bases we will set up on the moon, Mars and beyond.

To put the promise that you represent in context, I'd like to paint a brief picture of where the world's

cooperative space programs will be thirty years from now as we pursue the continued exploration of our corner of the Universe.

Just imagine: at that time there will be a permanent human presence on the Moon; perhaps space based telescopes will be providing clear pictures of continents on Earthlike planets light years away; the world's stock markets will celebrate the rise of robust commerce in low-Earth orbit; and for the first time in human history, explorers will be examining the river deltas, mountains and canyons of a neighboring planet.

This is the space program I have long dreamed we at NASA and our partner space agencies would be executing. This is the space program that will challenge

all of you, to the best of your abilities, as we collectively realize our most profound exploration dreams.

Again, I thank you for your warm greeting, and I wish to extend once more my congratulations to the graduates and best wishes to those of you whose studies here at ISU are just beginning.